

ABSTRACT OF THE DISCLOSURE

[0052] A slurry polymerization process removes a portion of the fluid slurry without using a settling leg or a continuous take-off. The process uses a reactor take-off valve that is periodically fully closed and fully opened such that the withdrawn slurry is removed from the reactor in a discontinuous manner. The regular, periodic full closing and full opening of the take-off valve reduces instances of polymer plugging the take-off valve. In another aspect of the invention, a take-off valve is throttled in a repetitive pattern to reduce plugging of the take-off valve.